

Without conceding the Examiner's contentions with respect to the JP '865 publication, the Office Action recognizes that JP '865 lacks the use of rubber as a main component of the porous member. Additionally, in the last two lines of paragraph 3 of the Office Action, the Examiner appears to acknowledge that JP '865 additionally lacks the hardness properties of the claimed invention.

The Office Action contends, however, that Ogawa "discloses the sound absorbing material made from polyethylene foam or foamed rubber." Moreover, the Office Action concludes that "[s]ince JP'865 as modified by Ogawa is using the same rubber foam to form the sound insulation sheet as Applicants and the sound insulation sheet of JP'865/Ogawa meets the recited structure, it is the examiner's position that the hardness properties would be inherently present."

In this context, however, the Ogawa patent discloses hardness characteristics of its materials and thus any "inherency" analysis is neither necessary nor proper.

Ogawa describes a noise reducing cover including a main body portion 16, a first inside layer 18, and a second outside layer 20. Ogawa describes these components as an integral composite 16, 18, 20 that is "rigid enough to maintain a required shape of the noise reducing cover but soft or resilient enough to effectively absorb vibration and sound." See, e.g., column 5, lines 47-58. Ogawa describes hardness characteristics of the composite 16, 18, 20 in terms of Shore hardness. In particular, Ogawa describes that the Shore hardness of the composite 16, 18, 20 is preferably within a range of lower than 70, and more preferably within a range of higher than 60 and lower than 70. Ogawa further describes that if the Shore hardness of the composite is not higher than 60, the required

shape of the noise reducing cover cannot be effectively kept in cases where any structural reinforcing material such as the mesh material is used in the noise reducing cover. See, e.g., column 5, line 66 – column 6, line 7.

Shore hardness is equivalent to Scleroscope<sup>®</sup> hardness as described in "Standard Practice For Scleroscope<sup>®</sup> Hardness Testing Of Metallic Materials" (pages 462-465 are attached).<sup>\*</sup> Also attached are Tables 1 and 2 of E 140 (pages 266-267) listing hardness conversion numbers showing a correlation between Scleroscope<sup>®</sup> hardness and Vickers hardness. According to Table 1, it is found that Shore hardness (i.e., Scleroscope<sup>®</sup> hardness) of 60-70, which is a range according to Ogawa, is equivalent to a Vickers hardness of 458-577 (HV). The also attached Table 7 is an extract from another material showing hardness values of many types of stainless steels. More specifically, Table 7 describes mechanical characteristics in the state of solution treatment for austenite type of stainless steel. In Table 7, it is known that the Vickers harness of stainless steel is about 200 (HV). From this analysis, it is apparent that the Vickers hardness of 458-577 (HV) corresponding to the Shore hardness disclosed in Ogawa, is fairly hard. In fact, such hardness is considerably higher than the 25%-compressive hardness of 0.5 N/cm<sup>2</sup> or lower as set forth in the claimed invention.

Based on at least this distinction, Applicants respectfully submit that the rejection is misplaced.

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<sup>\*</sup> In fact, the term "Scleroscope" is a registered trademark of the Shore Instrument and Manufacturing Company, Inc.

In addition to the above, in column 7, line 1, Ogawa discloses "foam polyethylene" or a "foam rubber" as an example of the "main body portion 16." On the other hand, Ogawa also discusses the "main body portion 16" in the paragraph starting from column 2, line 63. According to this paragraph, it is described that "this first material comprises a foam polyurethane containing a thermosetting resin." Accordingly, it can be understood that the polyurethane includes a thermosetting resin.

This thermosetting resin is impregnated into fiberglass material provided in the main body portion 16 in order to prepare a first inside layer 18. Judging from this, it can be understood that the "foam polyethylene" or the "foam rubber" of Ogawa is indeed harder than the material of the claimed invention since Ogawa's materials were prepared by impregnating thermosetting resin.

For these reasons also, Applicants submit that the rejection is misplaced.

Beginning at column 6, line 60 – column 7, line 8, Ogawa describes an embodiment wherein the noise reducing cover 10 is not provided with the outside layer 20. In this context, however, in order to enable the Ogawa apparatus to maintain its shape, regardless of the existence of outside layer 20, according to the Ogawa description, the construction must have a Shore hardness higher than 60.

Still further, Applicants respectfully submit that neither JP '865 nor Ogawa provides any suggestion to modify the JP '865 structure as suggested in the Office Action. In fact, Applicants respectfully submit that JP '865 teaches away from such a modification. In paragraph 4 of JP '865, the publication describes its endeavor to improve the feeling of walking over the sound insulation sheet. JP '865 provides that the

feeling of a walk will be reduced if a buffer layer is made too soft. In this context, JP '865 thus teaches away from modifying its structure to incorporate a softer rubber material since to do so would be contrary to its express goals. For this reason also, Applicants submit that the rejection is misplaced.

With respect to the dependent claims, Applicants respectfully submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 8-15, 17, 18, 25-27, 29 and 30 were rejected under 35 U.S.C. §103(a) over JP '865 in view of Ogawa and U.S. Patent No. 5,665,943 to D'Antonio. The D'Antonio patent, however, does not correct the deficiencies noted above with respect to JP '865 and Ogawa, taken singly or in combination. As a consequence, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim. Withdrawal of the rejection is respectfully requested.

Claims 1, 3, 4, 7, 8, 14, 15, 17-21, 25-27, 30-33, 36-40, 43 and 49-51 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 4,128,683 to Nomura et al. This rejection is respectfully traversed.

The Office Action again recognizes that Nomura lacks the use of rubber as a main component of the porous member. As discussed above in detail with reference to the rejection over JP '865 in view of Ogawa, Applicants respectfully submit that the Ogawa patent in fact does not correct the deficiencies of the Nomura patent. Applicants respectfully submit that the discussion above concerning the deficiencies in Ogawa, i.e.,

the lack of a material having characteristics similar to that of the claimed invention, are similarly applicable, and Applicants respectfully submit that for similar reasons, this rejection is misplaced. With respect to the dependent claims, Applicants submit that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

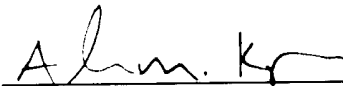
Applicants acknowledge with appreciation the indication that claims 34 and 41 are allowed.

In view of the foregoing remarks, Applicants respectfully submit that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

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Attachments: Pages 462-465 of Standard Practice for Scleroscope hardness Testing of Metallic Materials

MURAKAMI et al.  
Serial No. 09/482,731

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Tables 1 and 2 of E 140(pages 266-267)  
Table 7 (page 661)